Variant origin of the superior thyroid artery in a Kenyan population

Abstract:

Variant anatomy of the superior thyroid artery is important during surgical procedures, interpretation of angiograms, and interventional radiography in the neck. Pattern of the variations shows population differences but there is no data from the Kenyan population. This study therefore investigated the variations in origin of the superior thyroid artery in a Kenyan population. Forty six necks (36 males and 10 females) from 46 cadavers of black Kenyans in Department of Human Anatomy University of Nairobi, Kenya were bilaterally dissected to expose the origin of the superior thyroid artery. Pattern of origin of the vessel was determined on both sides in males and females. It originated from the external carotid artery common carotid artery and linguo-facial trunk in 80%, 13%, and 6.5% of the cadavers respectively on the right side. All but one of the superior thyroid arteries were ventral branches. There was asymmetric origin in 6.5% of cases. Origin from the common carotid artery was associated with high carotid bifurcation. Nearly 20% of superior thyroid arteries showed variant origin. Of these, 6.5% arose from the linguo-facial trunk, much higher than in the Caucasian and Oriental populations. Origin from common carotid artery is substantially lower than prevailing figures from other populations. These findings support ethnic variations. Preoperative angiographic evaluation is recommended.